

**IN THE CLAIMS:**

Please amend the claims as follows:

Claim 1 (Currently Amended): A disposable protective cap for a temperature measurement probe of an infrared radiation thermometer introducible into a body cavity comprising:

a base body of the disposable protective cap shaped to fit the body cavity and having a window transparent to infrared radiation,  
~~characterized in that~~ wherein the base body includes at least one air chamber at least in parts to improve heat insulation between the temperature measurement probe and the body cavity.

Claim 2 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the base body is fabricated from plastic material and that the at least one air chamber are formed of soft, porous foamed plastic material.

Claim 3 (Canceled).

Claim 4 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the at least one air chamber is formed by foamed plastic having closed pores.

Claim 5 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the at least one air chamber has its outside close to the body cavity bounded by a flexible film.

Claim 6 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the at least one air chamber has its outside bounded by a flexible outer film fabricated from plastic.

Claim 7 (Currently Amended): A disposable protective cap for a temperature measurement probe of an infrared radiation thermometer introducible into a body cavity comprising:

a base body shaped to fit the body cavity and having a window transparent to infrared radiation, wherein the base body includes at least one air chamber at least in parts to improve heat insulation between the temperature measurement probe and the body cavity, and

~~The protective cap as claimed in claim 1, characterized in that the at least one air chamber is subdivided by fin members.~~

Claim 8 (Previously Amended): The protective cap as claimed in claim 7, characterized in that the fin members are formed of foamed plastic material.

Claim 9 (Previously Amended): The protective cap as claimed in claim 2, characterized in that the window is formed of a window film transparent to infrared radiation.

Claim 10 (Previously Amended): The protective cap as claimed in claim 9, characterized in that the window film is stretched tight by a holding device.

Claim 11 (Canceled).

Claim 12 (Previously Amended): The protective cap as claimed in claim 10, characterized in that the holding device is clamped upon the end of the base body closed by the window.

Claim 13 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the entire body base is provided with thermally insulative means, and that the window is reduced to the thickness of an infrared transmitting film by hot pressing or hot stamping.

Claim 14 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the base body is formed of plastic material.

Claim 15 (Previously Amended): The protective cap as claimed in claim 2, characterized in that the thermally insulating foamed plastic is made of polyethylene (PE), polyvinyl or polyurethane (PU).

Claim 16 (Previously Amended): The protective cap as claimed in claim 1, characterized in that the base body of the protective cap, prior to being applied to the temperature measurement probe, is not as yet shaped to fit the body cavity and that it is made of a material that is expandable so as to be stretched to the shape only when being fitted over the temperature measurement probe.

Claim 17 (Currently Amended): A device used with disposable protective cap for a temperature measurement probe of an infrared radiation thermometer introducible into a body cavity, comprising: a disposable the protective cap being shaped to fit the body cavity and having a window transparent to infrared radiation, characterized in that wherein the disposable protective cap is fabricated from a thermally insulating material and a forming operation is used to bring the window to the thickness transmissive to infrared radiation, and characterized in that the disposable protective cap includes a base body having at least one air chamber to improve heat insulation between the temperature measurement probe and the body cavity.

Claim 18 (Currently Amended): The protective cap device as claimed in claim 17, characterized in that the forming operation is a hot pressing or hot stamping operation.

Claim 19 (Currently Amended): The protective cap device as claimed in claim 4, characterized in that the window is formed of a window film transparent to infrared radiation.